

## REMARKS/ARGUMENTS

Claims 27, 29-38, and 40-58 are pending in the application. The Applicant hereby requests further examination and reconsideration of the application in view of these remarks.

In paragraph 3 of the final office action, the Examiner objected to claims 32-33 and 43-44 as being dependent upon rejected base claims, but indicated that those claims would be allowable if rewritten in independent form. In paragraph 4, the Examiner allowed claims 53-58. In paragraph 5, the Examiner rejected claims 27, 29-31, 34-38, 40-42, and 45-52 under 35 U.S.C. 103(a) as being unpatentable over Dokic in view of Hughes-Hartogs. For the following reasons, the Applicant submits that all of the pending claims are allowable.

According to claim 38, the first processor (i) generates a data word having two or more data bits, wherein each data bit has either a first bit value or a second bit value, and (ii) transmits the data word from a data port of the first processor to the signal unit. The signal unit (i) converts the data word into two or more interrupt signals by analyzing the bit value of each of two or more data bits in the data word, wherein each analyzed data bit in the data word having a specified bit value corresponds to a different interrupt signal, and (ii) transmits each interrupt signal from the signal unit to an interrupt port of an other processor. The Applicant submits that the cited references do not teach or even suggest such a combination of features.

In rejecting claim 38, the Examiner admitted that "Dokic is silent in: (c) converting, in the signal unit, the data word into two or more interrupt signals, wherein each analyzed data bit in the data word having a specified bit value corresponds to a different interrupt word." Instead, the Examiner cited Hughes-Hartogs as teaching the features of claim 38 missing from Dokic. In particular, the Examiner stated that "Hughes-Hartogs teaches a communications system having a signal splitter that converts a single signal (of words) and converts or splits it to a plurality of signals (or a spectrum of signals) with an analyzer to analyze the bit values of the signals," citing column 4, lines 41-58, and Fig. 3, items 61, 57, and 90.

### The Examiner Mischaracterized the Teachings in Hughes-Hartogs

Notwithstanding the Examiner's assertion otherwise, Hughes-Hartogs's signal splitter/combiner 61 is not "a signal splitter that converts a single signal (of words) and converts or splits it to a plurality of signals (or a spectrum of signals)." As described in Hughes-Hartogs, signal splitter/combiner 61 functions as an interface between send equipment 40 and receive equipment 50 on one side and digital line 62 on the other side for communication with a remote party 90. See, e.g., Abstract, lines 1-4, and column 3, lines 62-65. As well understood by those of even ordinary skill in the art, signal splitter/combiner 61 feeds incoming signals received on digital line 62 from remote party 90 to receive equipment 50, while feeding outgoing signals from send equipment 40 to digital line 62 for transmission to remote party 90. See, e.g., column 4, lines 41-43. Hughes-Hartogs contains absolutely no teachings to suggest that signal splitter/combiner 61 converts or splits a single signal into a plurality of signals.

### The Examiner Mischaracterized the Claimed Invention

In characterizing the teachings of Hughes-Hartogs, the Examiner stated that Hughes-Hartogs teaches converting or splitting a single signal into a plurality of signals. In so doing, the Examiner appears to be suggesting that claim 38 recites that the signal unit is adapted merely to convert "a single signal" into "a plurality of signals." Rather, claim 38 recites that the signal unit is adapted to convert "a data word" into "two or more interrupt signals." The data word of claim 38 is not just any "single

signal." Likewise, the interrupt signals of claim 38 are not just any "plurality of signals." The data word in claim 38 is transmitted from the first processor to the signal unit from a data port of the first processor. Similarly, the interrupt signals of claim 38 are transmitted from the signal unit to interrupt ports of one or more other processors. The terms "data words" and "interrupt signals" have specific meanings in the context of the invention of claim 38; they are not just synonyms for generic signals. As such, the Applicant submits that the Examiner mischaracterized the claimed invention by suggesting that claim 38 recites that the signal unit is adapted to convert "a single signal" into "a plurality of signals." A data word may be a single signal, but it is not just any single signal. Similarly, two or more interrupt signals may be a plurality of signals, but they are not just any plurality of signals.

#### The Combination of References Does Not Provide the Claimed Invention

Even if Hughes-Hartogs were assumed to teach a signal splitter that converts a single signal into a plurality signals, which the Applicant denies, the fact remains that combining the teachings of Hughes-Hartogs with those of Dokic would still not provide the invention of claim 38. In claim 38, a data word that arrives from a data port of the first processor is converted into two or more interrupt signals that are transmitted to the interrupt ports of one or more other processors. Nothing in Dokic or Hughes-Hartogs teaches or even suggests such a combination of features. In Dokic, there is no data word that arrives from a data port of a first processor and is then converted into two or more interrupt signals that are transmitted to the interrupt ports of one or more other processors. Significantly, Hughes-Hartogs has absolutely nothing to do with interrupt signals. In fact, the word "interrupt" does not even appear in Hughes-Hartogs.

Thus, even if the Examiner accurately characterized the teachings in the prior art, which the Applicant explicitly denies, combining those teachings fails to provide the claimed invention.

For all these reasons, the Applicant submits that currently amended claim 38 is allowable over Dokic. For similar reasons, the Applicant submits that currently amended claims 27, 49, and 51 are allowable over Dokic.

Since claims 29-37 depend directly or indirectly from claim 27, it is further submitted that those claims are also allowable over Dokic. Since claims 40-48 depend directly or indirectly from claim 38, it is further submitted that those claims are also allowable over Dokic. Since claim 50 depends from claim 49, it is further submitted that claim 50 is also allowable over Dokic. Since claim 52 depends from claim 51, it is further submitted that claim 52 is also allowable over Dokic.

In view of the above amendments and remarks, the Applicant believes that the now-pending claims are in condition for allowance. Therefore, the Applicant believes that the entire application is now in condition for allowance, and early and favorable action is respectfully solicited.

Respectfully submitted,

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